REMARKS

Claims 1-12 and 14-21 are pending in the present application. By this Amendment, previously presented claims 1, 3 and 7-8 has been amended; and new claims 14-21 have been added. Applicants respectfully request reconsideration of the present claims in view of the foregoing amendment and the following remarks.

I. Prior Art Rejections:

Rejection of Previously Presented Claims 1-12 Under 35 U.S.C. §103(a) In View of U.S. Patent No. 5,704,961 (Hudson) Further In View of U.S. Patent No. 6,924,250 (Cornes)

Previously presented claims 1-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 5,704,961 issued to Hudson (hereinafter, "Hudson") in combination with U.S. Patent No. 6,924,250 issued to Cornes (hereinafter, "Cornes"). This rejection is respectfully traversed.

Applicants respectfully submit that one skilled in the art, given the teaching of Hudson in combination with the teaching of Cornes and the general state of the art, would not have been motivated to formulate a pesticide concentrate as recited in Applicants' claimed invention. In particular, one skilled in the art, given the teaching of Hudson in combination with the teaching of Cornes and the general state of the art, would not have been motivated to formulate a pesticide concentrate comprising a pesticide and an ionic nitrate salt additive effective in reducing corrosion of metal surfaces, wherein the ratio of the ionic nitrate salt additive to the pesticide is less than or equal to 0.3:1. For at least this reason and the additional reasons provided below, the proposed combination of the teaching of Hudson with the teaching of Cornes fails to make obvious Applicants' claimed invention.

The teaching of Hudson is directed to non-corrosive nitrogen-containing fertilizer solutions comprising specific corrosion inhibitors in the form of monocarboxylic acids, polycarboxylic acids, or mixtures thereof. The teaching of Hudson directs one skilled in the art to utilize the disclosed corrosion inhibitors in liquid nitrogen-containing fertilizers due to the corrosive nature of nitrogen-containing fertilizer components (e.g., ammonia, urea, ammonium nitrate, ammonium sulfate, etc.). See, for example, the "Background of the Invention" section of

Hudson.

Beginning in column 2, line 42, the teaching of Hudson discloses liquid fertilizer solutions comprising the disclosed corrosion inhibitors in combination with one or more nitrogen-containing compounds. When describing liquid fertilizer solutions containing an ionic nitrate salt, namely, ammonium nitrate, the teaching of Hudson describes liquid fertilizer solutions comprising a minimum of 14.0 wt% of the ionic nitrate salt and up to 44.2 wt% of the ionic nitrate salt. When describing a liquid fertilizer solution containing the minimum amount of 14.0 wt% of the ionic nitrate salt, the teaching of Hudson discloses that the same liquid fertilizer solution also contains other fertilizer components in the form of 11.2 wt% of urea, 2.7 wt% of monoammonium phosphate, 8.2 wt% of diammonium phosphate, and 9.7 wt% of potassium chloride. See, column 2, lines 58-62.

In column 2, lines 62-64, the teaching of Hudson teaches that the disclosed liquid fertilizer solutions may further contain other nutrients or treatment chemicals such as pesticides; however, the teaching of Hudson does not disclose or teach any suggested amounts of the other nutrients or treatment chemicals, including any pesticides.

The teaching of Cornes is directed to synergistic herbicidal compositions comprising mesotrione and a second herbicide selected from a list of herbicides as shown in column 1, lines 35-52. Although the teaching of Cornes discloses a number of addition components for the synergistic herbicidal compositions, depending on whether the resulting synergistic herbicidal composition is in powder or liquid form, the teaching of Cornes does not disclose, teach or suggest the use of an ionic nitrate salt in any of the disclosed synergistic herbicidal compositions.

The December 28, 2009 non-final Office Action suggests that one skilled in the art, given the teaching of Hudson and the general state of the art, would have (1) sought out the teaching of Cornes, and (2) subsequently incorporated mesotrione (or any other pesticide) from the disclosed synergistic herbicidal compositions of Cornes into the liquid fertilizer composition of Hudson so as to provide a ratio of ionic nitrate salt (e.g., ammonium nitrate) to the incorporated mesotrione (or other pesticide) of less than or equal to 0.3:1. Applicants disagree.

Applicants respectfully submit that the teaching of Hudson may suggest to one

skilled in the art to incorporate a pesticide into the disclosed liquid fertilizer compositions of Hudson, but not so as to result in a pesticide concentrate having a ratio of ionic nitrate salt (e.g., ammonium nitrate) to pesticide of less than or equal to 0.3:1. Moreover, Applicants respectfully submit that the teaching of Hudson actually teaches away from pesticide concentrates having a ratio of ionic nitrate salt (e.g., ammonium nitrate) to pesticide of less than or equal to 0.3:1 given that Hudson is directed to nitrogen-containing fertilizer compositions having a relatively high concentration of nitrogen-containing fertilizer components, such as ammonium nitrate, when present. In other words, Applicants respectfully submit that the teaching of Hudson suggests to one skilled in the art to formulate liquid fertilizer compositions having a relatively high concentration of ionic nitrate salt, when present, not a relatively low concentration relative to one or more pesticide components as found in Applicants' pesticide concentrates.

The December 28, 2009 non-final Office Action attempts to fortify the position that the teaching of Hudson suggests, to one skilled in the art, a ratio of ionic nitrate salt (e.g., ammonium nitrate) to pesticide of less than or equal to 0.3:1. Specifically, the December 28, 2009 non-final Office Action discloses on page 7, lines 3-10:

> The difference between the invention of the instant application and that of Hudson is that Hudson does not expressly teach the claimed ratio of the ionic nitrate salt additive to the pesticide component wherein the ratio is less than or equal to 0.3:1. Hudson teaches the use of 14% by weight of ammonium nitrate (component C) and 9.7% KCl (component D) and 25-60% water (component A) and that pesticides can be added. Thus, when C=14, D=9.7 and A=25, A+C+D = 48.7 wherein the rest of the composition could be pesticide (B) is 14 to 50 which is about 0.3:1.

Applicants respectfully submit that the teaching of Hudson does not teach, suggest or motivate one skilled in the art to add pesticide in an amount of up to 50 wt% in order to obtain an ammonium nitrate to pesticide ratio of less than or equal to 0.3:1 as suggested in the above noted portion of the December 28, 2009 non-final Office Action. Applicants respectfully submit that to do so would alter the principle of operation of the teaching of Hudson, namely, to provide liquid nitrogen-containing fertilizer compositions having a relatively high concentration of nitrogen-containing components (i.e., from greater than 14 wt% to 44.2 wt% of ammonium nitrate in combination with other fertilizer components). The Federal Courts have frowned on

such a modification of the prior art. As stated by the Court in *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959), "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious."

In addition, given that the teaching of Hudson does not in any way suggest to one skilled in the art to incorporate such a large amount of pesticide into the disclosed liquid fertilizer compositions or decrease the amount of ammonium nitrate in the disclosed liquid fertilizer compositions, Applicants respectfully submit that the reasoning with regard to the above quoted example on page 7, lines 3-10 of the December 28, 2009 non-final Office Action is flawed given that Examiner Brown does not take into account the other fertilizer components used in combination with the 14 wt% ammonium nitrate as discussed above and in column 2, lines 58-62 of Hudson, namely, additional fertilizer components in the form of 11.2 wt% of urea, 2.7 wt% of monoammonium phosphate, and 8.2 wt% of diammonium phosphate.

When explaining the rational and motivation for the proposed combination of the teachings of Hudson and Cornes, as well as the subsequent modification of the liquid fertilizer compositions of Hudson, the December 28, 2009 non-final Office Action states the following from page 7, line 17 to page 8, line 8:

> It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Hudson (US Patent 5,704,961) in view of Cornes (US Patent 6,924,250 B2) and use about 0.5% to as much as 95% or more in a synergistic combination of a copper chelate of mesotrione and a second herbicide. **Hudson teaches that ammonium nitrate is used as a corrosion inhibitor** and can be used in solutions that may also contain other nutrients or treatment chemicals such as pesticides. Cornes teaches that formulations comprising mesotrione may contain as little as about 0.5% to as much as 95% or more in a synergistic combination of mesotrione and a second herbicide (column 4, lines 25-29). Thus, one would be motivated to devise a composition that would provide a herbicidal synergistic combination as well as prevent corrosion. (Emphasis added.)

Applicants disagree.

Contrary to the bolded and underlines portion of the above text, Applicants note that the teaching of Hudson does **not** teach or suggest that ammonium nitrate may be used as a

corrosion inhibitor in any composition. In fact, the teaching of Hudson clearly discloses that ammonium nitrate causes corrosion, and due to the corrosive nature of ammonium nitrate, corrosion inhibitors in the form of monocarboxylic acids, polycarboxylic acids, or mixtures thereof must be utilized in order to compensate for the corrosiveness of ammonium nitrate and other nitrogen-containing components of liquid fertilizer compositions.

Applicants respectfully submit that the teaching of Hudson, the teaching of Cornes, and the general state of the art, prior to Applicants' present invention, failed to recognize the corrosion inhibitor properties of an ionic nitrate salt, such as ammonium nitrate, when used at relatively low concentrations within a pesticide concentrate. Further, the teaching of Hudson in combination with the teaching of Cornes and the general state of the art, prior to Applicants' present invention, failed to provide any motivation to one skilled in the art to formulate a pesticide concentrate comprising an ionic nitrate salt such that the ratio of ionic nitrate salt to pesticide is less than or equal to 0.3:1 as recited in Applicants' claimed pesticide concentrates.

For at least the reasons given above, it is respectfully submitted that the proposed combination of the teaching of Hudson with the teaching of Cornes and the general state of the art, fails to make obvious Applicants' claimed invention as embodied in independent claim 1. Since claims 2-12 depend from independent claim 1 and recite further claim features, the proposed combination of the teaching of Hudson with the teaching of Cornes and the general state of the art also fails to make obvious Applicants' claimed invention as embodied in dependent claims 2-12. Accordingly, withdrawal of this rejection is respectfully requested.

II. New Claims 14-21:

New claims 14-21 are also directed to pesticide concentrates. Support for new claims 14-21 may be found in at least the following locations of Applicants' original specification (i.e., International Publication No. WO2005/060492 A2): page 3, line 32 to page 4, line 1 (claims 14 and 18); page 3, lines 10-16, page 4, lines 3-4, and page 6, lines 6-9 (claims 15-16); page 3, lines 22-24 (claim 17); page 7, lines 4-7 (claims 19 and 21); and page 3, lines 10-16, and page 3, line 32 to page 4, line 1 (claim 20).

For at least the reasons provided above with regard to the patentability of claims 1-12, Applicants respectfully submit that new claims 14-21 are also patentable over the art of record.

III. Conclusion:

For at least the reasons given above, Applicants submit that claims 1-12 and 14-21 define patentable subject matter. Accordingly, Applicants respectfully request allowance of these claims.

Should Examiner Brown believe that further action is necessary to place the application in better condition for allowance, Examiner Brown is respectfully requested to contact Applicants' representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 503025.

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W&K Matter No.: 10075.0016USWO
Syngenta Docket No.: 70347